

REMARKS

This response is in response to the first Office action (Paper No. 3) dated July 2, 2003.

Claims 1 to 23 are pending in this application.

Claims 1-4 and 6-16 have been amended to more clearly define the present invention, and claims 24-34 have been newly added by this amendment. Claims 17-23 have been canceled without prejudice or disclaimer as to its subject matter

No new matter has been amended.

I. Election/Restrictions

The examiner stated that affirmation of the election made on the phone must be made by applicant in replying to this office action.

In response to this requirement, the applicant hereby affirms the provisional election of Group I.

II. Drawing

The examiner stated that the proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 12 April 2002, has been approved, and that a proper drawing correction or corrected drawings are required in reply to the Office action.

New drawings are submitted herewith.

III. Claim Objection

Claims 1-3, 6 and 11-15 are objected to because of the following alleged informalities: a single claim which claims both an apparatus and the method steps of using the apparatus is considered improper because this type of claim fails to positively recite the boundaries of protection. The examiner further stated that, if applicant is attempting to describe the structural limitations by the limitations' functions with regard to the apparatus, it is recommended that applicant uses acceptable structural claims language for the claimed apparatus, (e.g. "for accommodating", etc.) and not method steps, and, that, however, similar to the claim language as presently claimed, it is noted that this claim language merely describes a future intended use of the apparatus and is given little patentable weight in apparatus claims.

The applicant traverses the examiner's objection.

The examiner's objection is not based on the rule, law or even MPEP. There is never any objection to functional statements that merely set forth the movements, actions, or results of the structure previously recited. The examiner recommended using "for" to overcome the objection. It should be noted that no magic words are necessary for functional statements even if expressions such as "so that," "for," "in order to" are typical. An applicant is entitled to be his or her own lexicographer unless required otherwise by the law or rule. (See also MPEP 2173.02 saying that:

"Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. Examiners are encouraged to suggest claim language to applicants to improve the clarity or precision of the language used, but should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirement.")

Withdrawal of the objection is respectfully requested.

IV. Claim Objection

Claims 4 and 5 stand objected to under 37 C.F.R. 1.75 (c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

The examiner stated that the claims are directed to future intended use (*e.g.*, how the heating part is controlled and what washing cycles are selected, respectively) and fail to provide any further structural limitation to the claimed apparatus.

The applicant traverses the examiner's rejection.

MPEP 2173.05(g) states that:

A functional limitation is an attempt to define something by what it does, rather than by what it is (*e.g.*, as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step.

The law permits the applicant to define an element by what it does. The examiner's requirement for the applicant to provide any further structural limitation to the claimed apparatus in dependent claims is not based on the rule or law. Also, it is hardly understood to the applicant what "future intended use" means. (The examiner also stated the phrase "future intended use" in the objections of claims 1 and 6 -10. It seems like that the examiner argued that "tank for accommodating" is not a future intended use but "tank accommodating" is a future intended use. This is not proper.) With respect to claim 5, claim 5 further defines the "washing course." Nothing

is improper in claim 5.

Conclusively, Since the limitations in dependent claims 4 and 5 are proper, withdrawal of the objection is respectfully requested.

V. Claim Rejections

Claims 1 and 6-10 stand rejected under 35 U.S.C. 102(b) as being anticipated by US 3,927,972 to Kawamura *et al.*

Claims 1, 6-7, 9-13 stand rejected under 35 U.S.C. 102(b) as being anticipated by US 955,993 to Psarski.

Claims 2-3 stand rejected under 35 U.S.C.103(a) as being unpatentable over Kawamura in view of US 5,603,233 to Erickson *et al.*

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura in view of US 5,263,343 to Lee.

Claim 1 has been amended to incorporate the feature of the pushing projection which was claimed in the original claim 17. The examiner stated in the Office action that claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, claim 1 as amended is patentable and its dependent claims 2 to 16 are also patentable.

VI. Claims 4, 5, 14 and 15

The Office action summary indicated that claims 4, 5, 14 and 15 were rejected. However, the

Office action did not include the rejections of claims 4, 5, 14 and 15. Please clarify whether claims 4, 5, 14 and 15 are rejected, and provide, if rejected, the reasoning.

Please also note that the applicant has presented above reasons why independent claim 1 is patentable and claims 4, 5, 14 and 15 depend effectively from claim 1. Accordingly, claims 4, 5, 14 and 15 are also patentable.

VII. New claims 24 to 34

Claims 24 to 34 have been newly added to alternatively define the present invention.

The following explanation is in response only to the relevant argument made by the examiner for rejecting other claims in the Office action. That is, the examination of the patentability of the new claims should not be limited to the features mentioned in the below arguments.

With respect to claim 24, claim 24 reads as follows:

24. A washing machine comprising:
- a tank accommodating water, said tank having an opening, said tank having a plate to divide a space within said tank into a first space and a second space, said plate having a hole, said first and second spaces communicating with each other through said hole, said first space accommodating an article to be washed;
 - a heater mounted in said second space to heat the water in said tank;
 - a pump circulating the water from said second space to said first space;
 - an input unit mounted on said washing machine to input a washing course, said washing course comprising a cycle of a predetermined suspension time and a predetermined operation time of said pump; and
 - a controller controlling the heater to heat the water, said controller controlling said pump according to the inputted washing course.

First, the controller recited in claim 24 was not disclosed in the cited references.

With respect to the “controller,” the examiner cited Erickson ‘233 in the rejection of other

claims. Erickson merely teaches that “controller is used to control the operation of certain devices such as pumps, motors, valves, heaters and dispensers related to the machine for washing articles.” However, Erickson does not teach the way the controller controls the pump. The important thing is not that the controller can control the pump, but how the controller controls the pump.

Furthermore, claim 24 recites that the input unit for inputting a washing course comprising a cycle of a preset suspension time and a preset operation time of said pump so that the control may control the pump according to the inputted washing course. This feature was not disclosed in the prior art.

The examiner further cited the case law, *In re Vennor*, 262 F.2d 91, 95, 120 USPQ 193, 194; “broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.”

This holding cannot be applied to the present claim because the cited references do not disclose the same manual activity as recited in claim 24.

Moreover, in the above holding of *In re Vennor* cited by the examiner, the court cited the decision of *In re Rundell*. In *In re Rundell* cited by *In re Vennor*, the court held that:

“The mere statement that a device is to be operated automatically instead of by hand, **without a claim specifying any particular automatic mechanism**, is not the statement of an invention.” *In re Rundell*, (Emphasis added.) *In re Rundell*, 9 USPQ 220, 221.

The courts did not hold that any automatic means are unpatentable. For example, even if a washing machine replaces manual washing which accomplishes the same result, the washing machine itself can be patentable by specifying the mechanism of the washing machine. If not, a washing machine itself should never have been patented because a hand washing accomplishes the

same result or sometime better result. Here, claim 24 does not merely provide a mechanical or automatic means without specifying mechanisms. The mechanism of the controller is specified in the claims, and the claimed feature was not found in the prior art washing machine. The specification explicitly states the advantages which were not attained in the prior art as follows:

“the controller 38 adjusts the operating time of the circulation pump 88. For one example, where the material has a good absorbency, the circulation pump 88 stops for a relatively long time so that the washing is sufficiently drenched. Oppositely, where the material has a poor absorbency, the circulation pump 88 stops for a relatively short time so that washing water is continuously poured on the washing.” (Page 13, lines 9-12).

In other words, because the controller controls the pump according to the inputted water course which is comprised of a cycle of a suspension time and an operation time of the pump, the maximum absorbency can be obtained by inputting a proper water course.

The examiner’s attention is invited to consider that the controller controls the suspension time as well as the operation time of the pump. That is, with the control of the suspension time as well as the operation time of the pump, the pump can be properly controlled to achieve the result specified in the specification. This feature is not suggested or mentioned in the prior art.

Second, the claimed invention as a whole is patentable.

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983).

MPEP 2141.02 states inter alia:

“[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the ‘subject matter as a whole’ which should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103.” *In re Sponnoble*, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969).

Therefore, the examiner’s attention is invited to consider that the present application recognizes the problems and these problems were not recognized in the cited references. This should be considered in determining the obviousness of the invention.

Particularly, the specification of the present application identifies that “[i]f the temperature of washing water rises, the part of the washing contacting with air is oxidized, and therefore it may be damaged.” (Page 4, lines 1-3). Accordingly, the control of the circulating pump is important to solve this problem. It should be noted that Kawamura et al. and Psarski are directed to machine for textile treatment such as dyeing, not directed for conventional washing machine. That is, the purpose of the machine of Kawamura et al. or Psarski is to chemically modify the textile (e.g., by oxidizing the textile).

Therefore, the claimed invention is not obvious over Kawamura et al. modified by Erickson, when the claimed invention as a whole is considered, particularly, the problems to be identified in the present invention are considered.

With respect to claim 27, support for the new claim 27 is found in the specification at pages 12-14 and Figs. 3 and 4.

Claim 27 recites the feature of the relationship between the predetermined temperature, the

predetermined operation time, and the predetermined suspension time. The relationship brings about advantages never attained in the prior art. The specification states one of the advantages explicitly as follows:

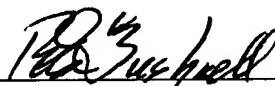
“For another example, where the material requires a high temperature washing, the circulation pump 88 stops for a relatively long time so that the washing is soaked sufficiently. Oppositely, where the material requires a low temperature washing, the circulation pump 88 stops for a relatively short time so that washing water is continuously poured on the washing.” (Page 13, lines 12-16).

Since the relationship recited in claim 27 is not disclosed in the prior art, claim 27 is patentable.

A fee of \$ 72.00 is incurred by the addition of four (4) claims in excess of total claims 23. Applicant's check drawn to the order of Commissioner accompanies this Response. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "R. E. Bushnell", is written over a horizontal line.

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